The estimated natural gas requirements of each South Star site will be approximately 27,000 Million British Thermal Units (MMBtu) lower heating value (LHV) per day. Natural gas will be delivered to each South Star site from the existing interstate gas transmission line operated jointly by Kern River Gas Transmission Company and Mojave Pipeline Company (Kern-Mojave) with approximately 4.75 miles of new 16-inch pipeline interconnection constructed as part of the project and shown on Figure 2-1 and described in Section 2.2.5.

The supply from the Kern-Mojave system is abundant and reliable, and no alternate gas supply is being incorporated into the facility design. In addition, the facility is being designed to operate exclusively on natural gas. In the unlikely event of an interruption in the Kern-Mojave gas supply either for operation or physical reasons, each South Star site would shutdown until the system is restored.

The properties of natural gas to be supplied to South Star are expected to reflect the analyses shown in Table 7-1.

Table 7-1. Natural Gas Fuel Properties

	Kern/Mojave Moles, percent by volume
Constituent	
Methane	87.059
Ethane	5.722
Propane	1.021
N-Butane	0.162
I-Butane	0.11
N-Pentane	0.017
I-Pentane	0.023
Neo-Pentane	—
Hexane +	0.029
Oxygen	0.017
Carbon dioxide	5.099
Maximum Total Sulfur Content, Grains/100CF	—
Specific gravity	0.651
Higher heating value, Btu/scf	1020.6

Source: Texaco North American Production, 1998
Btu/scf = British thermal units per square
CF = cubic feet cubic feet
= Not available